

**State of Florida
Telecommunications Site Review
Collocation Version**



Consultants, Inc.

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October 15, 2014

Mr. Scott Stoudenmire, Deputy Director
Department of Sustainable Development
City of Coconut Creek
4800 West Copans Road
Coconut Creek, Florida 33063

**RE: T-Mobile Wireless #FB2181A "Coconut Creek Government Center"
4800 West Copans Road**

Dear Mr. Stoudenmire,

At your request, on behalf of the City of Coconut Creek, Florida ("City"), CityScape Consultants, Inc. ("CityScape"), in its capacity as telecommunications consultant for the City, has considered the merits of an application submitted by T-Mobile Wireless ("Applicant") to become the third collocation wireless service on an existing one hundred twenty-five (125) foot monopole-type support structure, see *figure 1* and *Exhibit A*. The site is owned by the City of Coconut Creek and located at 4800 West Copans Road in Coconut Creek, Florida; see *figure 2*.

The Applicant is one of three proposed modifications to occur on the subject tower. Sprint Wireless has submitted an application for upgrades and changes which is currently being considered simultaneous with this application for collocation from T-Mobile (pending completion of lease and approval through City Commission). Verizon Wireless most recently requested approval for modifications and upgrades, which have been approved and are currently in process. The Applicant's proposed antenna installation will allow T-Mobile to continue to develop its wireless network and provide fourth generation (4G) advanced technologies within the subject area.

The Applicant proposes to add new tower mounted equipment, consisting of six (6) antennas; ten (10) RRU's (remote radio units) and two (2) surge protector/filters, along with two (2) 1.584 inch hybrid feed lines, see *figure 3*. Additionally, the Applicant proposes to add new weatherproof cabinets within the existing ground compound adjacent to the existing ground equipment for Sprint Wireless; see *figure 4*.

The Applicant has previously submitted a statement of compliance with all Federal Communications Commission (FCC) standards regarding human exposure to RF energy and rules regarding interference with other telecommunications services within the City; see *figure 5*.

The Applicant submitted a new Rigorous Structural Analysis Report (Revised) and dated October 14, 2014, which is an accurate representation of the current tower loading and confirms the tower and foundation will adequately support the existing equipment, including the proposed T-Mobile collocation and the previously submitted upgrades for Sprint Wireless. After all modifications, the new tower stress rating will be 98.9% out of a maximum allowed of 105%; see *figure 6*. AT&T has previously provided interest in becoming the fourth personal wireless provider to locate at the facility and thus any proposed future modifications or additions will require a new analysis and likely modifications and upgrades to the tower.

CityScape has visited the site on numerous occasions and has confirmed all necessary requirements for the proposed modifications can be accommodated within the existing property limits. The site has been designed and constructed by professionals with expertise in telecommunications site design and the construction drawings submitted on behalf of the Applicant confirms a continuation of that practice of the expertise in the discipline of maximizing the use of telecommunications facilities. This practice corresponds with the desires of the City of Coconut Creek.

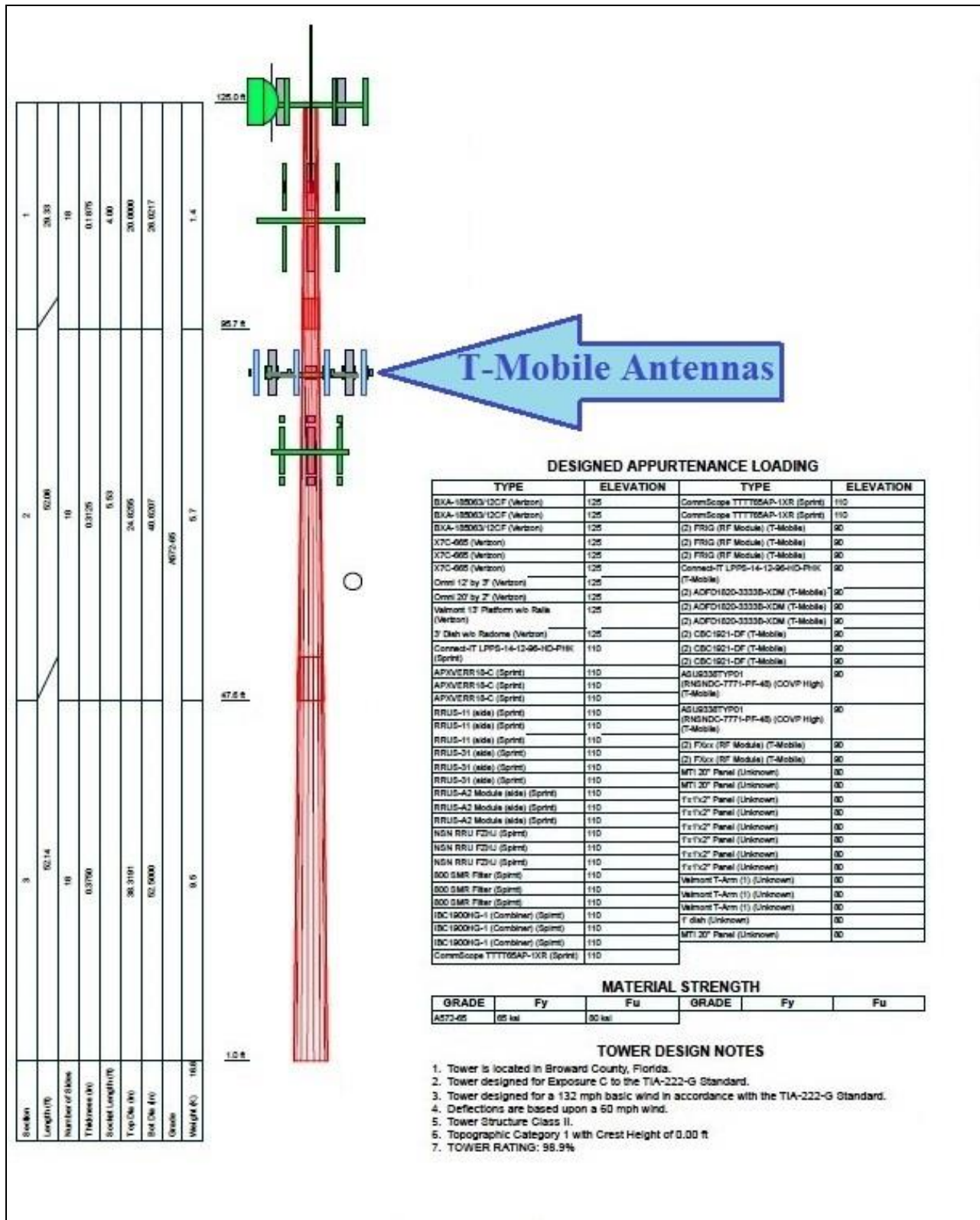
CityScape confirms the application is qualified under the federal Middle Class Tax Relief and Job Creation Act of 2012 and furthermore recommends the application be approved with the following conditions:

1. All feed lines shall be installed inside the monopole shaft; and,
2. All feed line access ports shall be sealed in a manner to prevent access by birds and other wildlife.

Respectfully submitted,



Richard L. Edwards
FCC Licensed
PCIA Certified
CityScape Consultants, Inc.



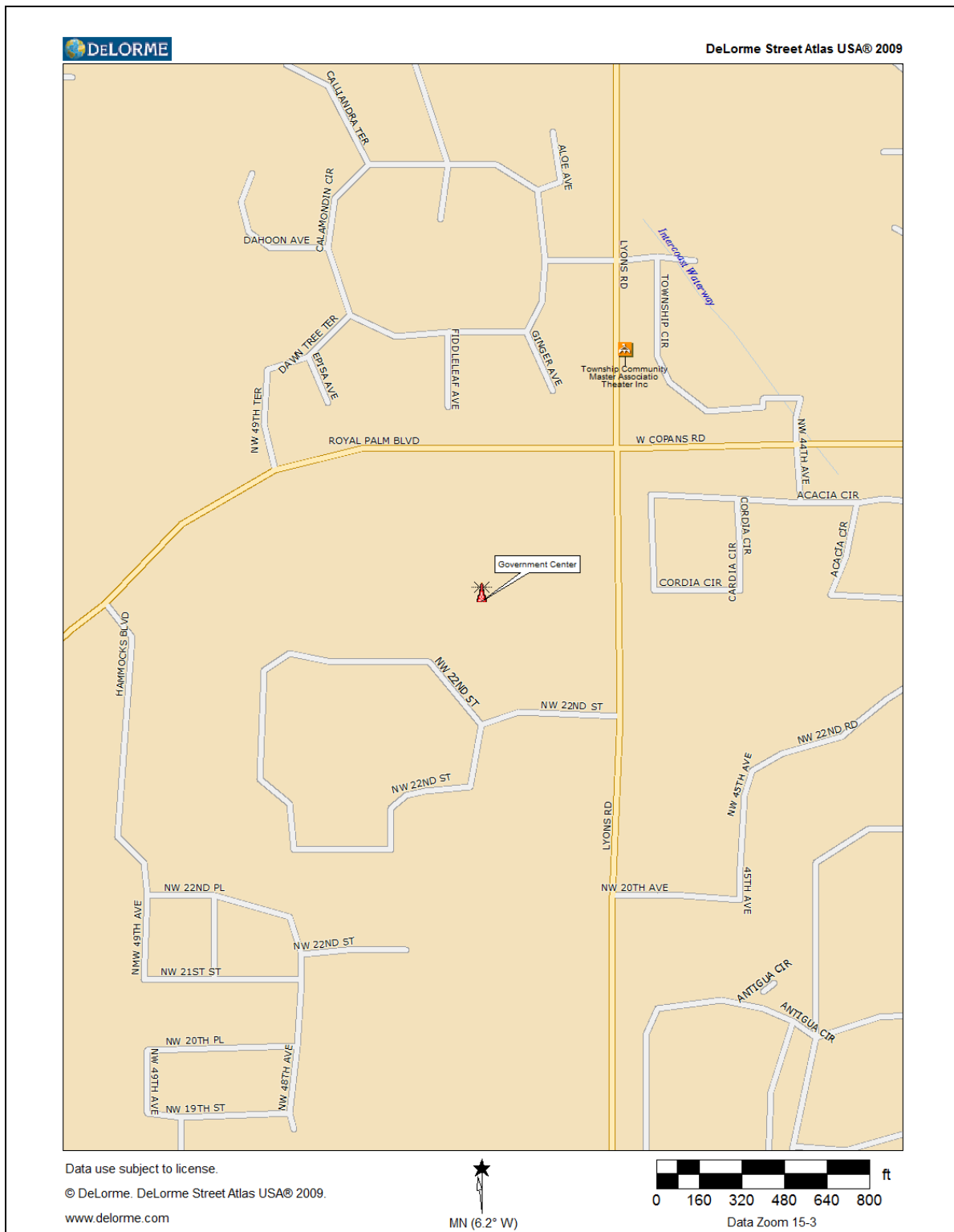


Figure 2. Site Location

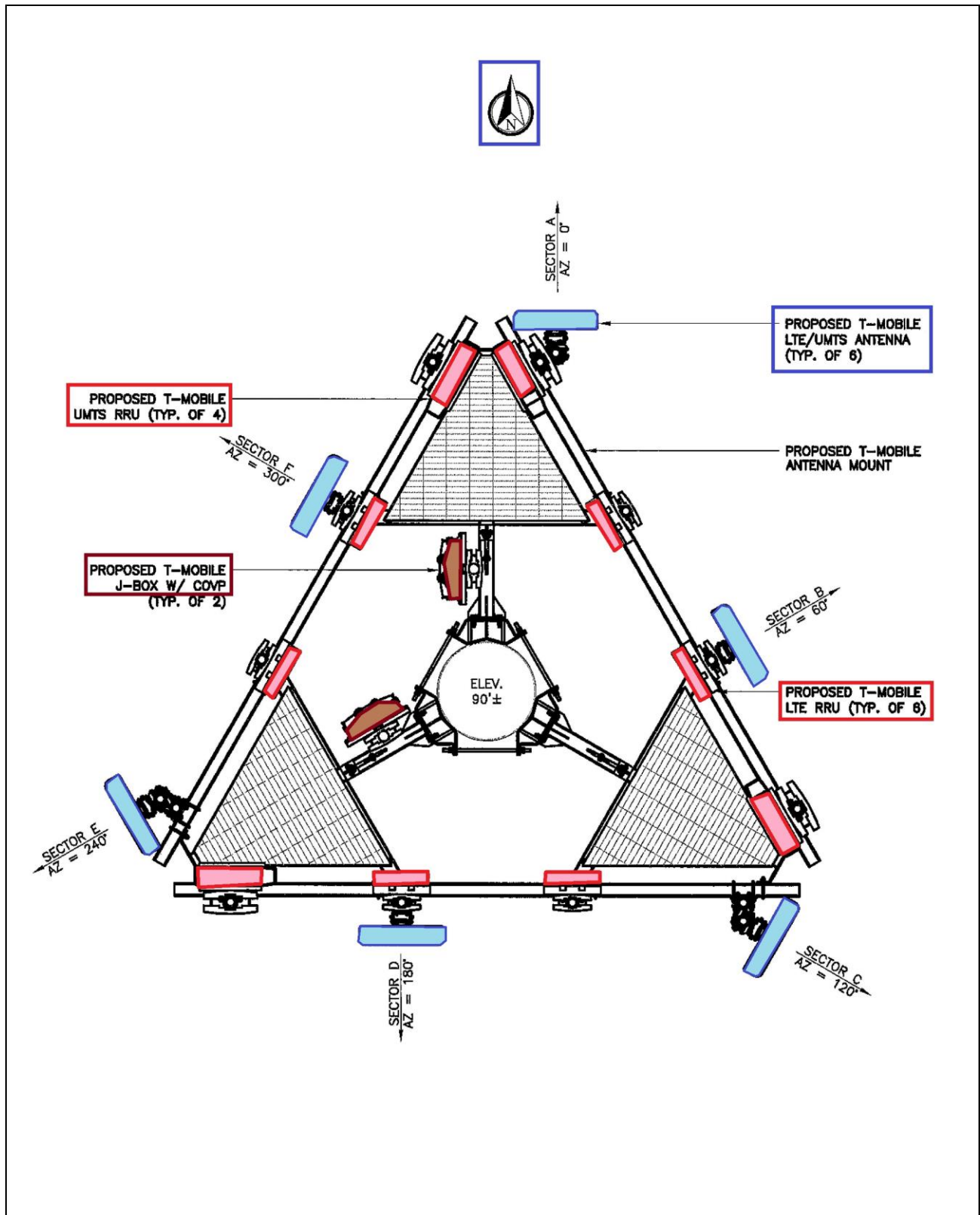


Figure 3. Proposed Antenna Configuration

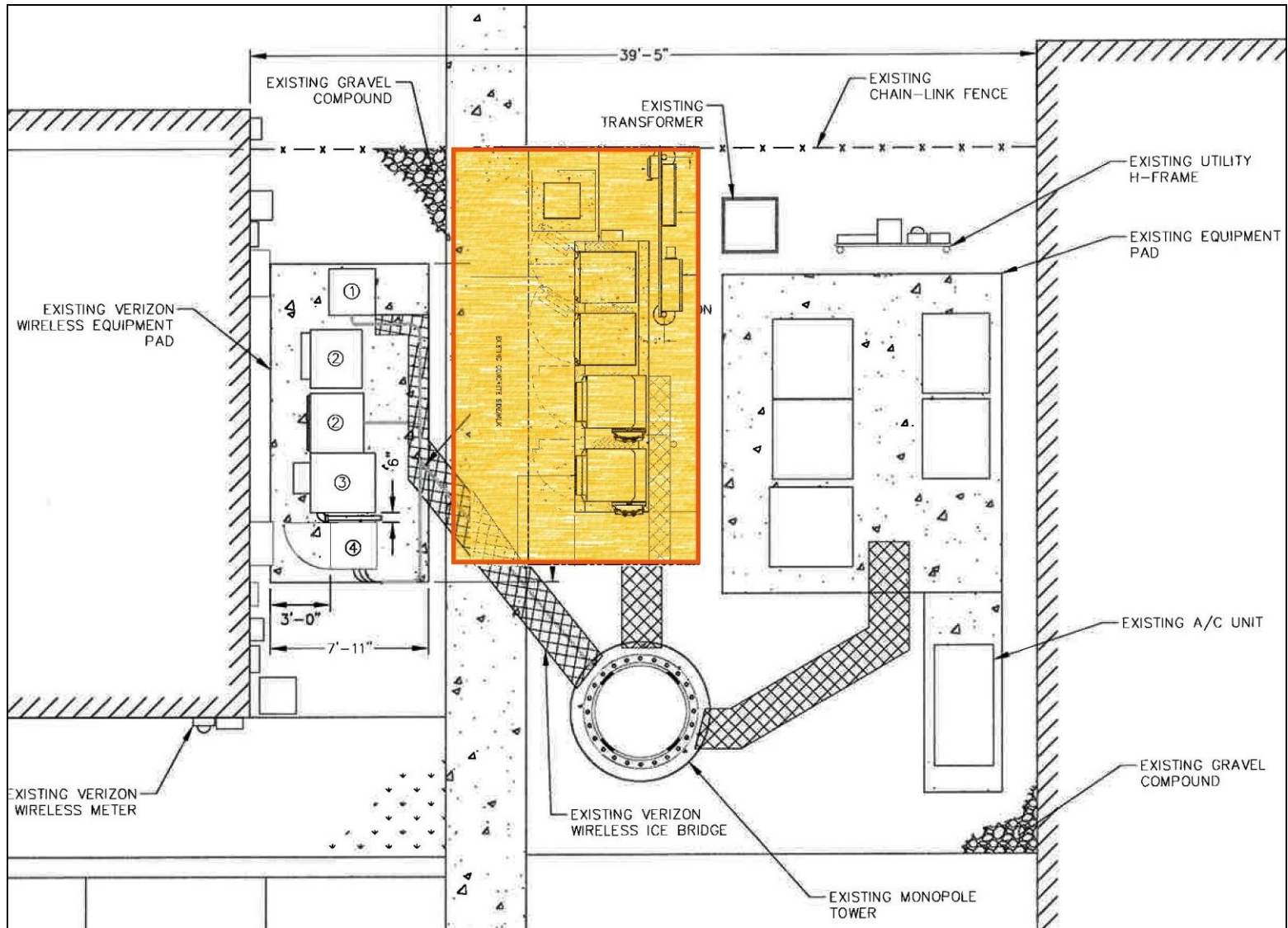


Figure 4. Proposed Ground Compound



Figure 5. Compliance with FCC rules

	
October 14, 2014	
Mike Nisenbaum T-Mobile USA 1300 Concord Terrace, Suite 200 Sunrise, FL 33323	CALTROP Corporation 3400 Lakeside Drive, Suite 525 Miramar, FL 33027 (954) 874-7870
Subject:	Rigorous Structural Analysis Report (Revised)
Carrier Designation:	T-Mobile: FB2181A (Coconut Creek City Hall)
CALTROP Project Number:	140-770.27
Site Information:	4800 W Copans Road Coconut Creek, Broward County, FL 33063 Latitude 26.258169°N, Longitude 80.187400°W 125' Monopole Tower
Dear Mr. Nisenbaum:	
CALTROP Corporation (CALTROP) is pleased to submit this revised Rigorous Structural Analysis Report to determine if the subject tower is able to support certain proposed additional loads.	
It is our understanding that T-Mobile USA (T-Mobile) desires to install new telecommunication equipment on the subject tower. This analysis was based on the supporting information listed in Table 3.0. Our services were performed in accordance with the terms and conditions of the existing field services agreement between CALTROP and T-Mobile. This report summarizes the results of our findings.	
The purpose of this analysis is to determine the suitability of the aforementioned tower to support the loading indicated in Table 2.2. This analysis has been performed in accordance with the TIA-222-G standard, based upon a nominal 3-second gust reference wind speed of 132 mph with no ice. Based on our analysis, subject to the assumptions noted, it is our opinion that the tower superstructure and foundation system can adequately resist the proposed Sprint equipment deployment without modification.	
Tower: Pass at 98.9%, Foundation: Pass at 98.9%	
This report has been prepared for the purpose of providing a structural evaluation of the subject telecommunications tower for the loading conditions indicated. It is intended for the exclusive use of T-Mobile. The information, assumptions, and recommendations contained in this report should not be used by others for any purpose without express written authorization from CALTROP. We appreciate the opportunity to provide our professional services to you and look forward to continuing our relationship. If we can be of any further assistance, please do not hesitate to call.	
Sincerely,  Dully M. Amaya, E.I. Staff Engineer Registered, Florida 100800943	 Michael A. Phillips, P.E. Principal Engineer Registered, Florida 68312 October 13, 2014
	

Figure 6. Structural Statement



Exhibit A. Subject Facility